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Case Report

Decentralized Economic Complexity in Switzerland and Its Contribution to Inclusive and Sustainable Change

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Abstract: The UN Sustainable Development Goals (SDGs) aim at harnessing economic complexity for sustainable and inclusive economic growth by calling for a decade of joint action. In this paper, we show how the action-oriented collaborative culture of complex and competitive economic ecosystems in places outside the major population centers may generate significant positive external effects for society and the environment at large. We illustrate this by means of two small case studies in Switzerland, a country with a federal system that enables decentralized economic development. The first case study investigates the economic ecosystem of the small town Monthey to show how productive migrants and embedded multinational companies increase the knowledge and know-how of local small and medium-sized enterprises (SMEs). The successful collaboration of insiders and outsiders accounts for the internal economic complexity that makes the region innovative and competitive. The second case study highlights the importance of the federalist system by showing how the canton of Solothurn succeeded in nurturing globally competitive export-oriented SMEs. We conclude that the success of these inclusive economic ecosystems in unexpected places may only be understood in the specific geographical, historical and political context, as well as the general openness of these regions toward entrepreneurial migrants and global business. The importance of local social capital makes it hard to replicate such success stories. Nevertheless, they indicate that the global knowledge economy may not just pose a threat, but also offer great opportunities for productive regions beyond the major global high-tech clusters of economic complexity.

Keywords: decentralized economic complexity; Monthey; Solothurn; migration; global business; innovation; economic ecosystems; knowledge economy



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1. Introduction

The 21st century is likely to become known as the century of global urban expansion. Poor people who aim to become more affluent do so by moving from areas with few economic opportunities, mostly located in disconnected rural regions, to areas with more economic opportunities, mostly found in growing and globally connected urban ecosystems. This explains why roughly two-thirds of the 272 million international migrants are estimated to be labor migrants [1]. In addition, almost 740 million internal migrants move from mostly rural to urban areas [2]. The result is increased migration-induced urban growth in high- and low-income countries alike [3,4]. The growing importance of studying the process of urbanization from the perspective of economic migration is reflected in the increased collaboration between the UN Habitat and the International Office for Migration. Even though the UN Sustainable Development Goal (SDG) 11 on sustainable urbanization does not directly address the fate of migrants in urban areas, the executive director of UN Habitat, Maimunah Mohd Sharif, pointed out in the Mixed Migration Review published in November 2020 that cities must create enabling environments for the social and economic inclusion of migrants and displaced people [5].

In this paper, we look at the rare case where migrants actually move from poorly connected large urban areas in low-income countries to highly connected small towns in

rather rural areas in high-income countries. This is the case in the federalist system of Switzerland where economic regions outside the major urban population centers reveal an unexpectedly high degree of “internal” [6] economic complexity combined with an advanced integration into global business networks. By comparing the economic ecosystem of the town of Monthey, canton of Valais, in the French-speaking part of Switzerland, with the economic ecosystem of the canton of Solothurn in the German-speaking part of Switzerland, we illustrate the importance of the historical, institutional and geographical context in which such diverse and complex economic ecosystems in the countryside emerge and how they thrive through a constructive type of mutualism between local knowledge-based and service-oriented small and medium-sized enterprises (SMEs) and the larger export-oriented companies in the region, between local residents and international migrants and between white and blue collar workers. They all share a common view on how to keep their region attractive as a place where they work and live, despite the scarcity of available resources (compared to the metropolitan growth centers). This view is shaped by the necessity to always focus on your customer rather than yourself and to select partners with complementary competences and skills that enable joint and effective action, be it for a public purpose or a business purpose.

In both case studies, we also discuss the important role of entrepreneurial migrants who successfully integrate into the local economy and community, but simultaneously keep their links to their countries of origin, not just through remittances, but also as agents who open access to new markets abroad and as investors who intend to eventually return [7]. We argue that the relative success in integrating migrants economically and socially outside the major metropolitan centers may also be related to the Swiss dual education system that provides many opportunities for migrants and their offspring to become familiar with and adjust to the Swiss rules of doing things, and to explore economic opportunities within the given set of institutional framework conditions. In this context, the pathway that is used by the majority of immigrant offspring in Switzerland is vocational education and training (VET), of which the most prominent type is apprenticeship. According to an OECD report [8], it enables a school-to-work transition for immigrant offspring that has proved to be of crucial importance, especially if the parents originate from lower-income countries. At the same time, apprenticeship in Switzerland offers many career opportunities and the income gap to professionals with an academic background is narrowing in view of the shortage of highly qualified technicians and engineers [9].

The findings of these case studies prove that less urbanized regions outside the major population centers can thrive in the global economy for different reasons, if they build up their own global network. This should induce urban planners to question some of the cherished urban theories such as Walter Christaller’s central-place theory [10] (published in 1933) and the more recent theories derived from it, in which the economies of small and medium-sized towns and communities are often framed as fringe locations within conventional regional urban hierarchies [11,12].

The findings also confirm prior research on the underestimated importance of economic ecosystems in small and medium-sized towns [13] and their ability to become global economic players in particular markets [14]. Furthermore, they validate the argument that migrants tend to have complementary skills and, therefore, rarely compete for the same jobs with the local residents [15,16]. Finally, the case studies confirm the evolutionary character of economic development and how it enables regions to build up unique know-how and knowledge and become integrated into global value chains, while continuously building up social and environmental resilience through internal economic complexity [17,18]. As such, prospering complex economic ecosystems outside the major metropolitan growth centers often turn out to perform above the national average [19], and the more inclusive nature of such small and medium-sized town economies may contribute in a substantial way to the United Nations Sustainable Development Goals (UN SDGs) in general, and to SDG 8 (inclusive growth and decent work) in particular [20].

2. Economic Complexity and Migration in Switzerland

As a high-income country in the heart of Europe, Switzerland is a popular destination of economic migrants. Over the past decade, annual net migration to Switzerland has ranged from 40,000 to 60,000 people who mostly originate from other European countries. In 2020, Switzerland, a country with 8.5 million inhabitants, had a foreign population of 2.15 million (roughly 25% of the population) with 1.41 million originating from relatively affluent European countries (EU, EFTA, UK) and 0.68 million from less affluent countries in Europe and beyond (see Table 1).

Table 1. Foreign Resident Population in Switzerland by Nationality and Region of Origin as of 31 December 2020 (Source: Swiss Federal Office of Statistics).

Region of Origin	Foreigners in Switzerland					
	Total Foreign Resident Population			Permanent Residence Permit (C)		
	Total	Women	Men	Total	Women	Men
Total	2,151,854	1,017,183	1,134,671	1,394,398	653,214	741,184
EU/EFTA/UK	1,470,945	664,043	806,902	981,662	444,892	536,770
Third countries	680,909	353,140	327,769	412,736	208,322	204,414
Eastern Europe (non EU)	365,614	184,874	180,740	284,578	139,391	145,187
Africa	91,754	43,318	48,436	37,940	17,224	20,716
American Continent	78,898	47,138	31,760	35,711	21,549	14,162
Asia	138,972	75,221	63,751	52,512	29,308	23,204
Top 10 immigrant countries in Europe						
Germany	311,481	140,283	171,198	218,486	98,926	119,560
Italy	328,270	138,892	189,378	252,393	107,931	144,462
Portugal	260,921	117,025	143,896	205,561	92,689	112,872
France	146,367	66,243	80,124	86,923	40,014	46,909
Kosovo	114,682	55,916	58,766	92,685	44,590	48,095
Spain	87,219	40,117	47,102	61,904	27,981	33,923
North Macedonia	67,567	34,262	33,305	54,262	26,321	27,941
Turkey	67,083	31,608	35,475	53,478	25,159	28,319
Serbia	59,657	30,030	29,627	49,217	24,300	24,917
Austria	44,537	20,935	23,602	317	88	229
Top 10 immigrant countries outside Europe						
Eritrea	30,860	13,771	17,089	8062	3248	4814
Sri Lanka	26,536	12,809	13,727	13,833	6756	7077
Brazil	21,927	15,333	6594	9863	7144	2719
USA	17,719	9069	8650	7113	3560	3553
China (Volksrepublik)	17,223	9754	7469	5081	3079	2002
India	15,207	6898	8309	5333	2308	3025
Syria	14,511	6588	7923	988	454	534
Thailand	9548	7775	1773	5305	4262	1043
Tunisia	7715	3250	4465	4623	1841	2782
Morocco	7602	4399	3203	4253	2441	1812

In this context, one would expect that the metropolitan area of the canton of Zurich (the center of economic power in Switzerland) with a population of 1.53 million would account for most of the wealth creation and absorb most of the international and inter-cantonal migration. However, thanks to the federalist system in Switzerland that enables cantons to keep their sovereign powers [21] and, with it, design their own economic policies, the income gap between Zurich and the other cantons is relatively small, taking into account the lower cost of living in the less urbanized regions [22,23]. The GDP per capita in Switzerland is roughly USD \$80,000, compared to around USD \$90,000–\$100,000 in the major metropolitan centers such as Zurich, Bern, Basel and Lake Geneva (see Zurich, for example, in Table 2). The annual population growth rate of the country is 0.7 percent

(two-thirds of the growth can be attributed to international migration) compared to a growth rate of 1.2 percent with international migration, also accounting for two-thirds of the growth, in the canton of Zurich (see Table 3).

Table 2. Development of the GDP, population and GDP/capita in Switzerland and selected Cantons (Source: Swiss Federal Office of Statistics).

Time Period from 2008 to 2018						
Population development						
	2008	2010	2012	2014	2016	2018
Zurich	1,332,727	1,368,822	1,408,575	1,446,354	1,487,969	1,520,968
Solothurn	251,830	254,758	259,283	263,719	269,441	273,194
Wallis/Valais	303,241	311,985	321,732	331,763	339,176	343,955
Switzerland	7,701,856	7,864,012	8,039,060	8,237,666	8,419,550	8,544,527
GDP/capita						
<i>in Swiss Franc at current prices</i>						
	2008	2010	2012	2014	2016	2018
Zurich	102,028	99,725	99,964	101,048	99,035	104,247
Solothurn	67,048	66,065	66,708	67,992	66,823	68,418
Wallis/Valais	53,775	55,203	54,230	53,864	53,969	56,422
Switzerland	80,201	80,026	80,728	81,676	81,411	84,219

Table 3. Population growth (natural and migration-induced) in Switzerland and selected cantons (Source: Swiss Federal Office of Statistics).

Switzerland and Selected Cantons	Population on 1 January 2018	Population Components			Population on 31 December 2018	Change	
		Birth	Net Migration			in Absolute	in Percentage
		Surplus	International	Intercantonal		Terms	%
Switzerland	8,544,527	18,392	43,352	0	8,606,033	61,506	0.7
Zürich	1,520,968	5282	12,760	1815	1,539,275	18,307	1.2
Solothurn	273,194	281	1217	445	275,247	2053	0.8
Wallis (Valais)	343,955	240	670	1099	345,525	1570	0.5

In other words, growth in terms of population and income per capita in the major population centers of Switzerland does not go at the expense of other, less affluent cantons, most of which also experienced positive growth rates in terms of population and income prior to the COVID-19 crisis. The economic crisis that hit Switzerland in 2020 due to the pandemic proved especially serious in the large cities with a large service sector (hotels, bars, restaurants, transport services, retail, cultural institutions, business travel, entertainment, event management, etc.). Therefore, the economic impact of this external shock did not affect small and medium-sized towns more negatively than large cities, especially when they could rely on a resilient economic ecosystem [24].

It is therefore not surprising that Switzerland ranks relatively low in social inequality, at least in terms of income distribution [23]. Its Gini Index (0.32 in 2017) [25] may be a little bit higher than in Scandinavian countries (on average 0.27), but Switzerland's percentage of government spending on GDP is 32 percent, rather than around 50 percent, as it is the case in Scandinavian countries [26]. As for the state of the environment, according to the Yale Environmental Performance Index, Switzerland ranks number one in the overall ranking, even though it is lagging behind in sustainable agriculture (42) and biodiversity conservation (63) [27].

At the same time, Switzerland ranks as the most globalized country and the most innovative country in the world according to the KOF Globalization Index [28] and the INSEAD Global Innovation Index [29], respectively. The country also ranks number one in the IMD World Talent Ranking [30] and number three in the Atlas of Economic Complexity [31].

Overall, these numbers strongly suggest that Switzerland is a good example to illustrate that a high degree of global economic integration does not necessarily increase social inequality and environmental problems.

Switzerland's historically grown internal economic complexity, its decentralized system of governance and its high rates of migration may have crucially contributed to its global economic competitiveness as well as its good performance in social and environmental terms. Even though recent empirical research on the impact of decentralized political systems on social inequality has shown rather mixed results in countries such as the USA [32], the Americas [33] and China [34], the degree of social inequality in the federal system of Switzerland remains comparatively low [22]. However, since Switzerland has not changed its federal system in any substantial form since its foundation in 1848, and its economy was less affected by the two World Wars than in the rest of Europe, it is difficult to investigate how social equality would have fared under different circumstances.

3. Sustainable Growth Outside the Major Urban Centers: The Examples of The Economic Ecosystems of Monthey, Canton of Valais, and the Canton of Solothurn

The Swiss midlands, located between the northern Jura mountains and the southern pre-Alpes, are often considered to be one large metropolitan region that stretches from the Lake Geneva Region to the metropolitan region of Zurich. However, even though the quality of infrastructure and public services as well as the general accessibility via public transport is high across the region, the less urbanized areas may be considered disadvantaged, because they are located far away from the downtown areas of the metropolitan regions. They lack the abundance of available resources found in the big cities and are therefore often labeled as "provincial". Nevertheless, these presumed provincial areas may still have strong service and industrial sectors located around small towns that reveal a high degree of internal economic complexity dominated by competitive and export-oriented SMEs, which offer high-quality products and services to international customers with a seat in the region and abroad. As such, they contribute to unique and resilient economic ecosystems that have strong historical roots, but also an impressive ability to respond to challenges through innovative entrepreneurship.

This description applies to the two economic ecosystems selected as case studies in Switzerland: one is located in the canton of Solothurn in the northwestern German-speaking part of the country. The other one is a small town called Monthey that belongs to the canton of Valais, but is located close to the border of the canton of Vaud in the French-speaking part of southwestern Switzerland (see Figure 1). The two case studies have been selected to illustrate how local economic complexity in less urbanized regions evolves in very different ways.

The economic ecosystem of the canton of Solothurn mostly consists of innovative SMEs that supply high-tech intermediate products to several European key high-tech industries, but also export finished high-quality products, mostly in the field of watchmaking, precision tools and medical technology.

The economic ecosystem of Monthey originally took advantage of the availability of certain natural resources (e.g., water, brine, gypsum) to create energy-intensive industries that contributed to the build-up of specialized knowledge and technical know-how in different markets. This resulted in a broad and diversified stock of human capital that also attracted long-term direct investments by large multinationals (e.g., Syngenta, Huntsman, Giovanola, Fixit, Tamoil). Having these multinationals as customers helped local SMEs to further develop their skills and to expand their activities far beyond their region.

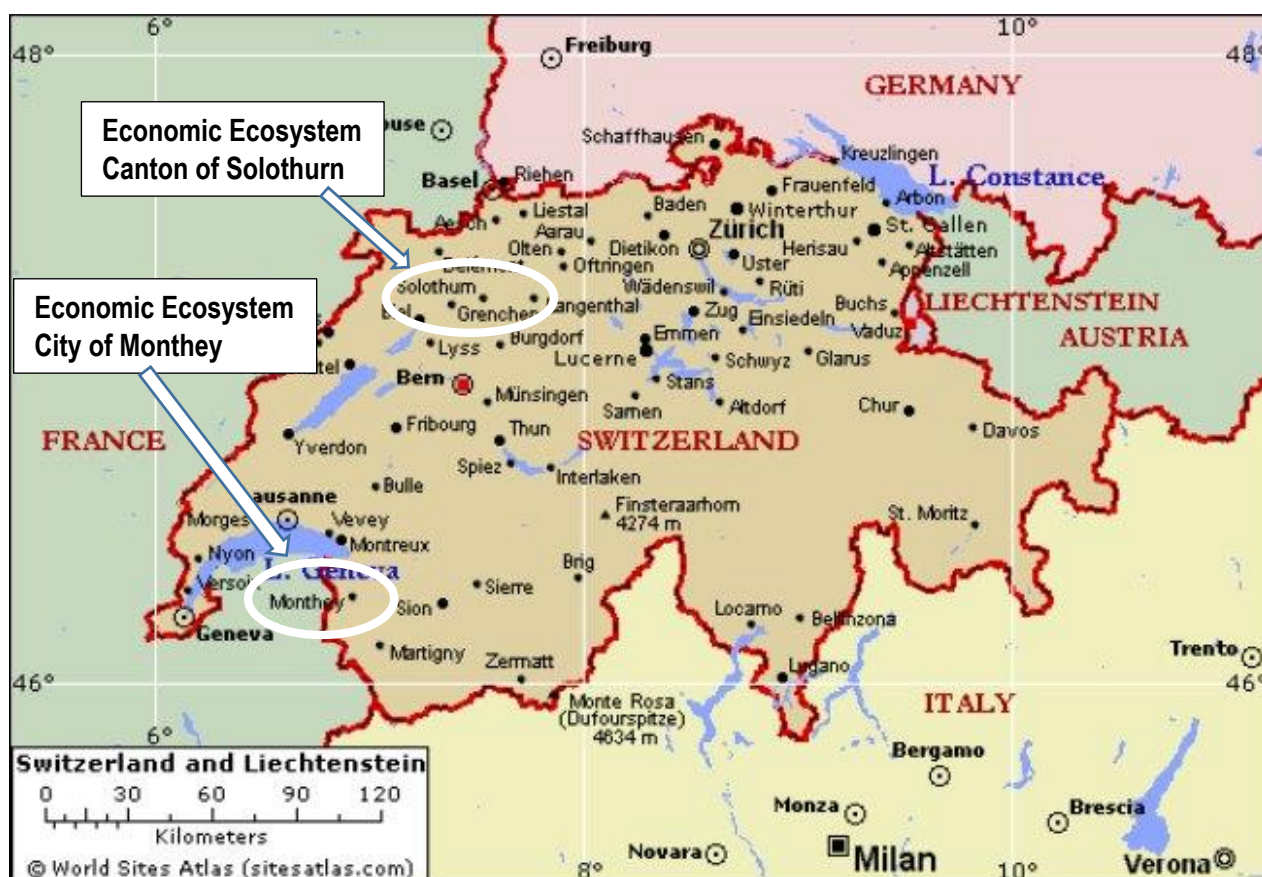


Figure 1. Location of the two economic ecosystems of “Monthey” and “Solothurn” on the Swiss map.

Both regions are strongly dependent on high- and low-skilled migrants from Europe and beyond.

Monthey’s population grew from a very small town of 8000 inhabitants in the 1960s to a city of almost 18,000 in 2020. The share of foreigners in the city amounts to 32 percent of the population (compared to the national average of 25 percent) [35].

In 2020, the canton of Solothurn had a population of 260,000 (compared to 200,000 in the 1960s). While its share of foreigners is equal to the national average, the share of migrants originating from outside the affluent European countries is 44 percent, much higher than the average national share of 31 percent. This is mainly due to the comparatively high share of migrants from the Balkans and Turkey [36]. The northern part of the canton (Dornach) is an integral part of the metropolitan region of Basel. It is separated from the southern part of the canton, where the majority of the population lives and works at the foot of the Jura Mountains. The two districts “Lebern” and “Wasseramt” in the southwestern part of the canton constitute the industrial core of the export-oriented economic ecosystem of the canton [37]. Its global network manifests itself in its joint innovation research projects with partners in Southern Germany, Massachusetts, New Jersey and California (USA), as well as in its expanding business activities in East Asia [38].

Both examples illustrate how internal economic complexity evolved over time through the interaction of the large urban centers with emerging industrial cities in the more rural regions of Switzerland. These emerging industrial cities eventually created their own global networks, which made Switzerland one of the most successful export-oriented economies in the world.

Swiss economic regions outside the major growth centers are characterized by a high degree of economic diversification with their own specific historical migration patterns that contributed to economic growth through entrepreneurship and innovation.

The historical roots of the economic structure in these regions go back to the time before the foundation of the Swiss Federal State in 1848. Afterwards, the Federal State mainly assumed a coordinating function to ease economic trade and exchange among the Swiss cantons through the creation of a national currency and infrastructure.

4. Opportunity-Driven Service-Oriented SMEs in Monthey Become Drivers of Green Growth

The city of Monthey is part of the region of Chablais, straddling the border of the cantons of Vaud and Valais in southwestern Switzerland, where the river Rhone flows into Lake Geneva. It is mainly known for its wine production. Prior to the creation of a national railway system at the end of the 19th century, the Rhone river used to be one of the most important trade routes. However, since the Rhone is the natural border between the cantons of Valais and Vaud in the region, it also represented a major barrier of exchange within the region of Chablais.

Prior to industrialization, the revenues outside agriculture originated primarily from the production of salt found in the Bex mines, situated on the Vaudois side and about six kilometers away from Monthey. During industrialization, the abundant availability of creeks and rivers in the region made it attractive for entrepreneurs to rely on water to power the emerging factories in different industries. A first milestone in the 19th century was the creation of a national factory called “Helvetia Zuckerfabrik” (sugar factory) in Monthey with the support of German investors. The technique, used to extract sugar from sugar beets, was adopted from France [35].

The company was eventually liquidated by a banker from Lausanne in 1881 in order to build a new company that took better advantage of the available natural resources. The new factory made use of electrolysis of brine, a technique used to produce caustic soda, chlorine, hydrogen and a whole range of basic products derived from these constituents. In 1904, the factory was taken over by “Basler Chemische Fabrik”, which focused its business on the production of synthetic dyes (especially indigo blue) responding to a global demand for colored textiles such as Jeans. After World War I, it became a major knowledge center for applied organic chemistry, producing drugs and crop protection on a commercial basis. After World War II, “Basler Chemische Fabrik” became CIBA-GEIGY, which was renamed “Novartis” after the merger with the company Sandoz in 1996. In 2007, Syngenta, the agrochemical company that emerged from the Novartis crop protection unit, took over the site and invested an additional USD \$150 million [39]. In view of the skills acquired in the region in the field of manufacturing chemicals, Huntsman Advanced Materials, another multinational chemical company with a focus on plastic resin and synthetic fiber manufacturing, set up business in Monthey in 2006 [40]. It currently employs 350 people. As a sign of commitment to the region, Syngenta and Huntsman joined forces in March 2020 to ramp up the production of disinfectants to ensure sufficient supply to local hospitals and pharmacies without charge [41].

Since 1896, the region has also been producing plaster thanks to the natural availability of gypsum found in the Bex mines. Nowadays, the company Fixit AG (part of the Fixit Group) produces around 5500 tons of plaster every single week. It is also known for several innovations, such as techniques that help simplify the use of gypsum and enable the integration of insulation applications, leading to the so-called Gypsum façade insulation system [42].

Giovanola was another important company founded in the 19th century that brought a lot of knowledge and know-how to Monthey. Its founder, Joseph Giovanola, set up the company in response to the growing demand for submarine manufacturing and pressure pipe welding. However, it also started to produce gondolas and ski lifts, since the canton of Valais became a major center for winter tourism at the end of the 19th century, fueled by wealthy British tourists. The company created major innovations in the different industries including the gravity clamp and rollercoaster construction technology. It was run successfully until 2005 when it went bankrupt [43].

Finally, Monthey also became a major site for the refinery of petroleum. In the 1960s, an oil pipeline was built from the port of Genova in Italy through the Valais Alpes reaching Collombey/Monthey, where an oil refinery plant was set up in 1962 to supply Switzerland with oil from Northern Africa. In 1990, the refinery was bought by the Libyan company Tamoil, which invested substantially in the upgrade of the plant. The company provided 17 percent of petroleum-based products in Switzerland when it had to close its facilities in 2015, after 50 years of operation. More than 200 people lost their jobs [44].

The economic history of Monthey may sound like a history of industrial decline in view of the loss of major industries in the past 20 years and the trend of the chemical industry to move away from petrochemicals toward more bio-based products. However, the economic ecosystem of Monthey is thriving, and the number of people working in the region currently exceeds the number of residents in the city. Its share of migrants from abroad has also increased continuously [45].

The economic success has a lot to do with the accumulation of knowledge and know-how that local SMEs acquired by serving the large companies operating in town. These SMEs became highly innovative in the search for tailor-made solutions for their customers. Having limited resources in terms of finance, technology and human capital, local SMEs could not afford to keep their employees underemployed. Instead, they continuously invested in their skills and gave them more autonomy to solve problems on their own, adapting to changes in customer base, standards and regulations by serving new markets with different products [35].

One SME that exemplifies all these virtues is “Bühler Enterprises Monthey” (BEM) an almost 40-year-old, family-owned business that has acquired knowledge and know-how in the fields of energy transport, distribution, control and management, as well as process automation. The company has 60 employees, of which 14 are apprentices. They serve customers with a single point of contact that is capable of managing and coordinating the various disciplines required from concept to realization. As such, the company is able to offer a “made-to-measure” service in various areas of domestic and industrial engineering including after-sale services. This business model is built upon the quality of resilience, which enabled them to survive the loss of major customers such as Giovanola and Tamoil (each of them generated more than 10 percent of BEM’s revenues at the time of closure). In fact, each crisis seems to have made BEM more competitive in the long-run. For example, when Tamoil ceased to produce, BEM reapplied its basic set of skills for the installation of solar panels. In the meantime, the branch for renewable energy installations generates more revenues than what the company previously earned when serving Tamoil. In view of its outstanding performance and its ability to continuously generate customer-oriented innovation in the field of renewable energy, BEM became a finalist for the Swiss Family Business Award in 2018, especially in view of its contribution to green growth in Switzerland. However, BEM stands for much more than that. The case demonstrates that companies, which generate real value in Switzerland and provide the foundation for thriving export-oriented local ecosystems in Switzerland, are found in unlikely and rather unknown places. BEM may not directly export products, but the multinationals producing in Monthey would have been unable to remain competitive in the global market without the unique services, skills and reliable work of their local SME partners. They represent the internal economic complexity of a regional economic ecosystem that heavily relies on bonding and bridging social capital.

The bonding capital within the SME is strong because its employees identify strongly with the purpose and family values of the company. The bridging social capital between BEM and the multinationals, as well as other clients in the region, is largely based on BEM’s reputation of being reliable. The company is known for delivering quality on time at a fair price. Often, it may even know more about the details of the production facilities of the local multinational than the managers who run the facilities. However, BEM would never risk a breach of trust, because the relationship of the mice and elephants in the region is based on mutualism [35]. One cannot thrive without the other. The same also applies with

regard to the relationship between Swiss nationals and foreign migrants in Monthey. They depend on each other, and this also creates a business climate of tolerance and mutual respect.

5. The Historical Roots of the Economic Ecosystem of the Canton of Solothurn: Export-Oriented SMEs as Drivers of Inclusive and Sustainable Economic Complexity

Unlike most countries in East Asia, Switzerland has no written innovation strategy, its public investments in R&D are relatively modest and it is highly decentralized. These conditions encourage the cantons, which have their own constitutions and tax regimes, to play an active role in innovation policy, and most of all, to experiment with different models of economic governance and innovation promotion. The canton of Solothurn exemplifies the active role of cantons as promoters of innovation and foreign economic relations with the purpose of serving the local economic ecosystem, which is dominated by manufacturing companies that have become increasingly service-oriented. In view of the manufacturing sector accounting for more 30 percent of the canton's GDP (compared to the Swiss average, which is below 25 percent) Solothurn may be called Switzerland's workbench. Over, 95 percent of the companies in the canton are SMEs, but one-third of them are global players in their respective market [38]. These export-oriented SMEs are well-organized in networks and also influence the economic policy of the canton, which is characterized by a liberal bottom-up approach, even though the canton is not known for being a tax haven in Switzerland [46].

From 1530 to 1792 the city of Solothurn was the seat of the French ambassador to Switzerland and an important place for France to recruit mercenaries. Mercenaries who succeeded abroad often returned as wealthy men to the canton and eventually became part of the local nobility. Some of these nobility families started to invest their fortunes in the early stage of industrialization in the build-up of infrastructure and iron foundries [47].

Especially after the repeal of the Edict of Nantes (granting religious tolerance) in 1685 by the French King Louis XIV, the French part of Switzerland benefited a great deal from the migration of the skilled and entrepreneurial Huguenots, the Christian protestant minority in France who felt more safe from religious persecution in the neighboring country. The Huguenots were pioneers in the early production of timepieces. In view of the growing demand for watches in the European aristocracy, the Huguenots helped make the western part of Switzerland a global center of the watch industry.

The watch industry reached the canton of Solothurn only in the 19th century, when watchmaking entrepreneurs moved from Neuchâtel to Grenchen, in the most western part of the canton, to produce watch movements (Ebauches). The intense handwork production of the watch movements enhanced the technical skills of the entire local population, including farmers in the Jura mountains who spent their time in the winter season to produce watch parts that were subsequently sold to movement producers. During the early period of industrialization, global competition in watch-making started to become stronger and forced the region to innovate, leading to the early adoption of modularization techniques that made watch production more efficient and less prone to failure. In the 20th century, Switzerland then became a leader in the global watch-making industry in process as well as product innovation, with a considerable share of it originating in the region of Grenchen [48].

With the emergence of quartz movements in the 1970s and the launch of the fashionable, low-cost watch "Swatch" in the 1980s, the industry acquired additional skills in fashion design, color printing on plastics, microelectronics (later applied to solar panel production) and the development and production of micro-batteries. The developer of the micro-battery of Swatch later set up his own family-owned company "Wyon AG" to produce rechargeable batteries for medical devices. In the meantime, the company has become the world market leader in the field, since its batteries can be recharged 5000 times compared to 1000 times achieved by the closest competitor. The company is not just highly profitable, but was also awarded several times for its environment and social sustainability strategy and for the development of a scalable innovation that substantially contributes to

the solution of the battery waste problem on the planet [49]. In other words, the company's scalable innovation does not merely generate profits, but also large, positive environmental externalities for society at large. However, these positive externalities resulting from innovative entrepreneurship have so far been ignored in the sustainability debate, which is largely focused on reducing the negative externalities of economic activities [50,51].

The knowledge and know-how acquired in the manufacturing, design and marketing of watches and their components, combined with the early exposure to global competition as well as the creation of a global network of business partners, prepared the groundwork for a diversified and competitive manufacturing industry in the canton [52].

Many of the successful SMEs in the canton started as suppliers of watch parts and measurement instruments for the large, local watch brands and manufacturers of movements that competed on an international scale. However, when the Swiss watch industry went through a profound crisis in the 1970s, many of these SMEs made use of their knowledge and know-how to serve other industries with precision tools, measurement instruments and high-quality intermediate products for the German car industry and other global high-tech manufacturers [52]. In addition, the economic ecosystem shifted its set of industrial competences from watch manufacturing to medical technology with SMEs, such as Ypsomed, Mathys, and Synthes (now part of Johnson & Johnson), growing into global players in growth markets including those of bone implants and medical delivery systems [38]. Over the past decade, most export-oriented SMEs invested substantially in digitalization and automation to cope with high-labor cost and a strong Swiss Franc. It ensured that the economic ecosystem remained competitive and growing through innovation [53]. In 2017, the multinational biotechnology company Biogen decided to invest more than USD \$1.5 billion in the economic region to build its next-generation biologic manufacturing facility [54]. It is expected to create up to 600 new jobs with many positive economic spillovers [55].

Despite its growth through innovation and its global network of business partners, institutions of higher learning in the canton of Solothurn are focused on applied sciences. Only 24 percent of the workforce have an academic degree from a university, compared to the Swiss average of 30 percent; while 56 percent started with an apprenticeship, compared to 47 percent on the national scale [38]. These numbers show, on the one hand, that the share of the workforce with an academic degree does not reveal yet anything about the global competitiveness of a region. On the other hand, the absence of a cantonal university may render it more difficult to attract talents to work in the region and to create a start-up culture, which is mostly associated with university spin-offs [56]. The economic ecosystem of the canton of Solothurn, despite offering great infrastructure and extensive recreational areas, also faces the challenge of retaining its skilled labor force in view of the attractive life in the nearby metropolitan centers of Bern, Basel and Zurich [38].

6. Supporting Migrants in Their Endeavor to Upgrade Their Skills Out of Self-Interest

The difficulty to recruit qualified locals for high- and low-skilled jobs in the competitive local industries is felt by most economic regions in the less urbanized areas of Switzerland. As a result, the share of migrants is increasing in these places as much as in the major population centers (see Table 3). Many of these migrants are highly skilled and assume leading positions in the high-tech industry. However, the majority of migrants come from low-income countries, and they are primarily equipped with good practical skills. Once they master the German language, they often take advantage of the Swiss dual education system or encourage their children to make use of it. It starts after secondary school with a solid dual-track apprenticeship combining work in a company with a two-year education in one of the vocational schools. Graduates then have the option to move to a university of applied sciences [57,58]. This then qualifies them to take over local jobs and businesses that are left vacant by former local residents who either have other job preferences or decide to move elsewhere. Switzerland has also several institutions designed match the skills of job seekers with the demands in government, industry and civil society [59]. The most popular

careers of those who complete a vocational training and then graduate from a university of applied sciences in Switzerland are in the fields of “economy and services”, “information technology and engineering”, “health care” and “social work” [59].

In many cases, these migrants arrive from large cities in the Mediterranean regions and the Balkans to eventually take over a village business that primarily serves the location population. This type of migration challenges the view of a one-way migratory flow from rural to urban areas. Moving from a poor urban area to a more affluent rural area elsewhere also has mutual advantages that go beyond the economic betterment of the respective migrants. Many local residents are happy that migrants become local shopkeepers that serve the local daily needs in the village. As economic players in the village, they also tend to participate in the social and political life of the respective municipality and, as such, positively contribute to the overall quality of life. In return, many migrants acquire new skills in their rather rural host region, and, thanks to the moderate cost of living (compared to the metropolitan regions of Switzerland), they are able to save money, which they tend to reinvest in businesses back home [60]. This applies in particular to migrants from Kosovo and Turkey, the third and fourth largest immigration communities in the canton [35]. For example, a study indicated that the value of remittances and investments from Swiss-based Kosovars, as well as their spending on family visits back home, probably exceeds the value of Swiss foreign aid for Kosovo [61]. Moreover, their contribution to the build-up of a local economic ecosystem in Kosovo through know-how transfer, investment and valuable business networks is likely to contribute more to the reduction of poverty and social inequality in the long run than all the publicly funded European aid programs in the region [62].

7. How Thriving Economic Ecosystems in Less Urbanized Areas Challenge Urban Planning Theory

The current public discourse on trends in urbanization still implies that economic growth takes place in attractive large urban regions at the expense of more resource-strapped rural regions [12,18,63–65]. In this context, many urban planners continue to implicitly or explicitly endorse Christaller’s central-place theory [10], assuming that there is a hierarchical distribution of settlements determined by the possible relations between population distribution and the provision of central functions [66,67]. In Christaller’s original regular triangular-hexagonal system [10], central functions are more likely to be found in the large cities because they require a minimum number of customers, and the interplay with the minor cities surrounding them is determined by the maximum distance a consumer is willing to travel to obtain a central function. It is certainly true that central functions are concentrated in large metropolitan areas, not just with regard to central administrative units, but also the presence of major cultural, social, health and educational institutions. A large metropolitan area is able to fund such institutions thanks to its high tax returns, resulting not just from a sizeable income-tax-paying population, but also from the taxes of large profitable companies in industry and finance, which tend to have their headquarters in the city. All this may lead to the spatial accumulation of knowledge and know-how, associated with the close proximity of world-class universities and high-tech firms (measured in terms of historical patent data). As such, a growing concentration of economic complexity in large cities may indeed result in growing social inequality, reflecting the increasing gap between the central regions moving ahead and peripheral regions left behind [64].

However, more recent research on economic life in settlements outside the metropolitan areas challenges the assumption that innovative economic ecosystems that export complex products with a low level of ubiquity are unlikely to emerge in places outside the major metropolitan growth centers [13]. These places mostly thrive by adopting capabilities that have been developed elsewhere. They do so through channels such as imitation, immigration, cooperation and learning [68]. Nevertheless, they are able to produce scalable innovation on their own, thanks to their embeddedness in global business networks and value chains [69]. Moreover, the emergence of a digital platform economy generates virtual

entrepreneurial ecosystems that are increasingly independent from location. This virtual dimension may not be able to replace the physical dimension, but it can add value to the economic ecosystem in less urbanized areas by enhancing their ability to connect to large corporations, innovative high-growth firms, universities and microenterprises outside the region [70]. Thus, there are many opportunities for peripheral economic regions with an existing high degree of internal economic complexity and a good physical and digital infrastructure to become more connected and prosperous in the age of the global knowledge economy.

8. Transactions of Decline Versus Economic Revival Through Entrepreneurship

The success stories of thriving economic ecosystems outside the large metropolitan centers should not conceal the fact that many small and medium-sized towns in Europe suffer from out-migration and economic decline [71,72].

For example, settlements outside metropolitan areas may fall into a trap of growing dependence on the nearby population center because they are entangled in transactions of decline, as Jane Jacobs called it [73]. They are largely the result of well-meaning regional economic policies, designed to subsidize industries in rural areas that employ lots of people but struggle to stay profitable. Such policies also aim at providing economic incentives for companies located in the population centers to transplant some of their production facilities into the provincial settlements. Even though such urban transplants make economic sense because of the lower costs of land and labor and their ability to create new jobs, they often prove to be too self-contained to interact productively with the local economic environment. This may also explain why economic convergence between rural and urban regions in the European Union tended to fail in those countries where rural regions benefited most from government hand-outs and regional economic development policies over the past three decades (i.e., Italy, Greece, Cyprus) [74].

In view of the many failures to revive urban economies outside the major population centers, many economists have concluded that the agglomeration effects of large cities may have become a major cause for growing regional disparities and social inequality, resulting in an increasing gap between rural and urban regions [75,76].

Recent research on the emergence and the dynamics of entrepreneurial ecosystems in peripheral regions have reached, however, a different conclusion. They see growing economic opportunities seized by innovation-driven networks of entrepreneurs in less urbanized areas that also result in positive social and environmental externalities [20,77,78].

9. Social Capital as the Foundation of the Action-Oriented Collaborative Culture of Economic Ecosystems in Less Urbanized Areas in Switzerland

The thriving economic ecosystems of Monthey and Solothurn may differ substantially in terms of historical context, institutional setting and economic structure, but they share a collaborative culture of pragmatic and outcome-oriented action. This culture builds upon a well-trusted and well-tried local business network that is, however, open to partnering with actors outside the network that share a common interest and offer complementary skills and competences.

If local professionals are asked what they appreciate most about their region, they often praise the informal networks that do not strictly separate the private from the professional life. “Here, we know each other well” is a sentence often heard [35,38]. Knowing each other well in terms of weaknesses and strengths may save a lot of transaction costs. Once there is a new task to be accomplished, the entrepreneurs who run one of the local, mostly family-owned firms, must quickly decide if there are sufficient internal resources to cope with the challenge, or if there is a need to acquire expertise from the outside. In this context, they have established a routine in quickly identifying who could be a suitable partner in the region to address a specific task, challenge or problem, or to seize on a business opportunity.

The entrepreneurial orientation and the effective resource orchestration enables these responsive and resilient family firms to quickly tap into knowledge and know-how [79], not

just from the personally known professionals, but also from the knowledge pool existing within nearby local firms, as well as the network of firms in which these local firms operate globally. In other words, it provides them with considerable access to decentralized resources in the region and beyond. The knowledge about the competences of the different stakeholders in the region reduces the search costs substantially. In other words, they follow the transaction cost approach of the theory of the firm as developed by Ronald Coase [80].

However, tapping into all these locally available resources is expected to be based on the principles of perceived fairness and reciprocity. If one economic agent in such a regional business network acquires the reputation of being a local free-rider who takes advantage of everyone but does not give anything in return, this agent risks being excluded from the positive network externalities [81]. As a result, transaction costs of the affected economic agent may massively increase, and eventually, ruin the business. Therefore, each individual within a firm, and each firm within a network of local firms, has a vested interest in contributing to and nurturing a culture of effective and result-oriented collaboration, because the benefits of being part of the network far exceed the costs [82]. In other words, the social capital acquired through the reputation of being a reliable and competent business partner may be as crucial as human and financial capital in regions that do not benefit from a large pool of resources, resulting from the so-called agglomeration effects of large cities [71].

10. Combining Bonding and Bridging Social Capital

Francis Fukuyama [83] argued that businesses in familial societies would be limited in the expansion of their network, and, with it, the expansion of their knowledge base, because they tend to trust their in-group (extended family network) at the expense of distrust toward the out-group—the unknown people that do not belong to the local network. This argument is based on the assumption that bonding social capital (trust between people “like us”) and bridging social capital (reaching out to people “unlike us”) are mutually exclusive. This may be true if bonding capital strongly builds upon a joint identity linked to identical world views, ethnicity, religion or ideology. However, the bonding capital of economic ecosystems in less urbanized areas is more based on a joint and pragmatic purpose of getting things done and ensuring that the region and its firms prosper despite the lack of agglomeration effects that competitors in more dense urban areas enjoy. This type of bonding social capital does not exclude or undermine efforts to invest in bridging social capital by linking up with institutions outside the region. If economic agents outside the local network share a particular purpose regarding a particular challenge to be addressed, a business opportunity to be seized or innovation to be developed, they are welcome to join. If it serves the region and its business, bridging social capital is a complement rather than a substitute of bonding social capital [84]. This attitude applies as much to migrants as it applies to multinational companies that settle in the region.

Simultaneously, the local entrepreneurs are constantly on the watch regarding recent global trends and developments within their industry and beyond. They visit international fairs and hire consultants to survey market trends, scout for talents and evaluate the relevance of emerging innovation. They may also set up research collaborations with firms and universities outside their region to develop innovations that are tailored to the needs of their customers. As such, they also become part of business-relevant digital platforms that help overcome the problem of distance and enable them to plug into networks that would otherwise be limited to actors that benefit from the agglomeration effects of large cities.

11. Concluding Remarks

The current public discourse on sustainability is shaped by stakeholders in large cities and manifests itself in many niche businesses and social activities that support sustainable life styles, as well as events organized by cultural institutions and universities to discuss

sustainability topics of global concern [85]. The association of sustainability with urban life styles and premium consumer products also reveals a connection between sustainable behavior and social status, typical for consumption-based cities throughout history [86]. The focus on praising the urban consumer for saving the planet cannot just be found in retail marketing strategies, but also in many policy documents that promote a circular economy. They tend to adopt terms such as “clean and green”, associated with responsible urban dwellers who properly separate their waste so that it can be recycled easily. This representation conceals, however, the reality that recycling work and resource recovery is mostly “dirty” work, often carried out by migrants because it is shunned by locals [87]. This work hardly gets any credit in the sustainability discourse because affluent urban residents do not associate it with the terms “clean and green”, which reveals a close association between “sustainability” and “wellness” in the urban discourse [20].

Sustainability in large cities also tends to be framed as an urban struggle in which environmentally and socially conscious citizens protest in front of the headquarters of multinational companies, accusing them of pursuing profit at the expense of people and the planet [88]. This “good versus bad” narrative of sustainable development ignores that businesses are also part of society, and that, ultimately, scalable solutions that effectively address sustainability challenges are not developed in cultural institutions or universities, but in business [89]. In other words, it may not be urban activism, but rather urban economic ecosystems, that enable sustainable change if the respective institutional framework conditions encourage business investment in scalable sustainable innovation, which generates positive externalities for society and the environment [90].

This insight suggests that the sustainability debate may have to become less focused on urban environmental activism and consumerism and care more about innovation in the productive sector of business, which tends to be located in the outskirts of large cities and beyond. This sector generally also reveals a high degree of economic complexity, and the fact that its activities are not concentrated in affluent large urban centers may also be relevant in regard to efforts to reduce social and economic inequality [20,91].

In this paper, we selected two case studies representing Swiss economic ecosystems in less urbanized areas to illustrate how economic complexity may emerge in small and medium-sized towns outside the major population centers. The federalist system of Switzerland encourages decentralized economic development. In this context, it is a great advantage that the physical and digital infrastructure is well developed almost everywhere in the country, and every region also has its particular cultural and natural attractions. While the economic ecosystem of Monthey in southwestern Switzerland shows how local SMEs continuously acquire new knowledge and know-how through the collaboration with locally embedded multinationals, the economic ecosystem of the canton of Solothurn reveals how local export-oriented SMEs can become export champions themselves. They do so by building on historically grown competences and skills, while seizing opportunities to build up global business networks. In this context, the export promotion agency of the canton plays an important role [38]. In both cases, the growing internal economic complexity has resulted in a successful integration of entrepreneurial migrants and the creation of green growth through innovative and business-savvy SMEs.

The high degree of economic complexity in Switzerland as a whole manifests itself in the fact that, for whatever specialized services, technologies or products one requires for the execution a particular purpose, there is a Swiss-based company that may deliver it in the quality and quantity desired, and on time. This internal economic complexity may be linked to the need of the country to export products and services at an early stage due to an early saturation of the small domestic market. As a result, most SMEs are quite competitive either as suppliers of export-oriented firms or as exporters themselves. These exports contain a high degree of embedded knowledge and are diverse and relatively low in ubiquity, which explains why Switzerland ranks as one of the top countries in terms of economic complexity.

However, this high degree of economic complexity is not concentrated in large urban clusters, but found in many unlikely places across the country. In view of the unique historical and political context, as well as the social capital that was built up in these economically competitive regions over decades, it is hard to replicate these success stories of prospering economic ecosystems in less urbanized regions.

Economic regions like the city of Monthey or the canton of Solothurn may contribute to sustainable and inclusive change in low-income countries due to return migration. Both regions have an above-average share of migrants from low-income countries because they often find it difficult to recruit locals for open positions. Migrants acquire skills and competences, accumulate savings and build up their own transnational business networks. Many of them decide to make use of their acquired resources to become investors in their home countries, and concomitantly link their economies to a wider global network.

There are certainly many failures, frictions and other shortcomings in decentralized economic ecosystems that have not been discussed in this paper. However, they are part of every evolving economic ecosystem that is characterized by trial and error. Thus, this may be the main finding of the analysis: idealistic activism and consumerism found mostly in large urban centers may help create public awareness of sustainability challenges, but real sustainable change may take place elsewhere. It is the result of concrete joint action with the pragmatic purpose of getting things done. The contribution to the UN SDGs of this action-oriented and entrepreneurial approach, found especially in more resource scarce economic regions, should not be underestimated.

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References

1. International Office for Migration (IOM). *World Migration Report*; United Nations: Geneva, Switzerland, 2020.
2. Skeldon, R. International migration, internal migration, mobility and urbanization: Towards more integrated approaches. *Int. Off. Migr.* **2018**, *13*. [CrossRef]
3. Saunders, D. *Arrival City: How the Largest Migration in History is Reshaping Our World*; Vintage: New York, NY, USA, 2011.
4. Aerni, P. Coping with Migration-Induced Urban Growth: Addressing the Blind Spot of UN-Habitat. *Sustainability* **2016**, *8*, 800. [CrossRef]
5. Mixed Migration Review (MMR). Highlights. Interviews. Essays. Data. Mixed Migration Centre. Danish Research Council. 2020. Available online: <http://www.mixedmigration.org/resource/mixed-migration-review-2020/> (accessed on 20 November 2020).
6. Cakir, B.; Schluep, I.; Aerni, P.; Cakir, I. Amalgamation of Export with Import Information: The Economic Complexity Index as a Coherent Driver of Sustainability. *Sustainability* **2021**, *13*, 2049. [CrossRef]
7. Bosworth, G.; Atterton, J. Entrepreneurial in-migration and neoendogenous rural development. *Rural Sociol.* **2012**, *77*, 254–279. [CrossRef]
8. Liebig, T.; Kohls, S.; Krause, K. *The Labour Market Integration of Immigrants and Their Children in Switzerland*; OECD Social, Employment and Migration Working Papers No. 128; Directorate for Employment, Labour and Social Affairs, OECD Publishing: Paris, France, 2012; Available online: <https://www.oecd-ilibrary.org/content/paper/5k9fjs1m2d2-en?crawler=true> (accessed on 17 February 2021).
9. Schellenbauer, P.; Walser, R.; Lepori, D.; Hotz-Hart, B.; Gonon, P. *Die Zukunft der Lehre: Die Berufsbildung in Einer Neuen Wirklichkeit*; Avenir Suisse Publikation: Zurich, Switzerland, 2010.
10. Christaller, W. *Die Zentralen Orte in Süddeutschland. Eine Ökonomisch-Geographische Untersuchung über Die Gesetzmäßigkeit der Verbreitung und Entwicklung der Siedlungen mit Städtischen Funktionen*, 1st ed.; Darmstadt Wissenschaftliche Buchgesellschaft 1980: Darmstadt, Germany, 1933.
11. Daniels, T.L. Smal. Town Economic Development: Growth or Survival? *J. Plan. Lit.* **1989**, *4*, 413–429. [CrossRef]
12. Harrison, J.; Heley, J. Governing beyond the Metropolis: Placing the Rural in City-Region Development. *Urban Stud.* **2015**, *52*, 1113–1133. [CrossRef]

13. Salder, J.; Bryson, J.R. Placing entrepreneurship and firming small town economies: Manufacturing firms, adaptive embeddedness, survival and linked enterprise structures. *Entrep. Reg. Dev.* **2019**, *31*, 806–825. [CrossRef]
14. Grillitsch, M.; Nilsson, M. Innovation in Peripheral Regions: Do Collaborations Compensate for a Lack of Local Knowledge Spillovers? *Ann. Reg. Sci.* **2015**, *54*, 299–321. [CrossRef]
15. Hausmann, R.; Nedelkoska, L. Welcome home in a crisis: Effects of return migration on the non-migrants' wages and employment. *Eur. Econ. Rev.* **2018**, *101*, 101–132. [CrossRef]
16. Czinkota, M.; Khan, Z.; Knight, G. International business and the migrant-owned enterprise. *J. Bus. Res.* **2021**, *122*, 657–669. [CrossRef]
17. Balland, P.A.; Jara-Figueroa, C.; Petralia, S.G.; Steijn, M.P.; Rigby, D.L.; Hidalgo, C.A. Complex economic activities concentrate in large cities. *Nat. Hum. Behav.* **2020**, *4*, 248–254. [CrossRef] [PubMed]
18. Richter, R. Rural social enterprises as embedded intermediaries: The innovative power of connecting rural communities with supra-regional networks. *J. Rural Stud.* **2019**, *70*, 179–187. [CrossRef]
19. Dijkstra, L.; Garcilazo, E.; McCann, P. The economic performance of European cities and city regions: Myths and realities. *Eur. Plan. Stud.* **2013**, *21*, 334–354. [CrossRef]
20. Aerni, P. *Global Business in Local Culture: The Impact of Embedded Multinational Enterprises*; SpringerBriefs in Economics; Springer: Berlin/Heidelberg, Germany, 2018; pp. 1–122. [CrossRef]
21. Linder, W.; Vatter, A. Institutions and outcomes of Swiss federalism: The role of the cantons in Swiss politics. *West Eur. Politics* **2001**, *24*, 95–122. [CrossRef]
22. Sharma, R. The Happy, Healthy Capitalists of Switzerland; Opinion. *New York Times*, 2 November 2019.
23. Föllmi, R.; Martínez, I.Z. *Die Verteilung von Einkommen und Vermögen in der Schweiz*; UBS Center Public Paper; University of Zurich: Zürich, Switzerland, 2017.
24. Regionalökonomische Auswirkungen von COVID-19. Available online: <https://regiosuisse.ch/node/2957> (accessed on 17 February 2021).
25. Gini Index (World Bank Estimate). Available online: <https://data.worldbank.org/indicator/SI.POV.GINI?end=2017&locations=CH&start=1982&view=chart> (accessed on 17 February 2021).
26. General Government Spending. Available online: <https://data.oecd.org/gga/general-government-spending.htm> (accessed on 17 February 2021).
27. Country Profile Switzerland. Available online: <https://epi.yale.edu/sites/default/files/2018-che.pdf> (accessed on 17 February 2021).
28. Top Fifty Countries in the Globalization Index. Available online: <https://www.statista.com/statistics/268168/globalization-index-by-country/> (accessed on 17 February 2021).
29. Global Innovation Index. Available online: <https://knowledge.insead.edu/entrepreneurship-innovation/global-innovation-index-2930> (accessed on 7 April 2021).
30. World Talent Ranking. IMD World Competitiveness Center. Available online: <https://www.imd.org/wcc/world-competitiveness-center-rankings/world-talent-ranking-2020/> (accessed on 17 February 2021).
31. Center for International Development at Harvard University. Atlas of Economic Complexity. Available online: <https://atlas.cid.harvard.edu/> (accessed on 7 April 2021).
32. Cavusoglu, T.; Dincer, O. Does decentralization reduce income inequality? Only in rich states. *South. Econ. J.* **2015**, *82*, 285–306. [CrossRef]
33. Bojanic, A.N. The impact of fiscal decentralization on growth, inflation and inequality in the Americas. *Cepal Rev.* **2018**, *2018*, 57–77. [CrossRef]
34. Hao, Y.; Liu, J.; Lu, Z.N.; Shi, R.; Wu, H. Impact of income inequality and fiscal decentralization on public health: Evidence from China. *Econ. Model.* **2021**, *94*, 934–944. [CrossRef]
35. Schöni, A. *The Iteration between Global Players and Local Companies within the Region of Chablais, Lower Wallis, Switzerland*; Presentation at ETH Zurich: Zurich, Switzerland, 2020.
36. Amt für Finanzen. Kanton Solothurn in Zahlen 2020. 2021. Available online: https://so.ch/fileadmin/internet/fd/fd-afin/stat/00/ktsoiz/WEB_42016_KtSOinZahlen2020.pdf (accessed on 30 March 2021).
37. Standortförderung Kanton Solothurn. Struktur und Strukturwandel in der Solothurner Wirtschaft Auswertung der Statistik der Unternehmensstruktur (STATENT) für den Kanton Solothurn und seine Bezirke. 2017. Available online: https://standortsolothurn.so.ch/fileadmin/standortsolothurn/pdf/Wirtschaftsstandort/STATENT-Auswertung_Schlussbericht_2017.pdf (accessed on 31 March 2021).
38. Graber, R. *The Role of Government and Economic Circumstances in Enabling Technological Breakthroughs*; Presentation at ETH Zurich: Zurich, Switzerland, 2020.
39. Syngenta: Geschichte des Werks in Monthey. Available online: <https://www.syngenta.ch/fr/entreprise/histoire-entreprise/monthey> (accessed on 17 February 2021).
40. Huntsman Eröffnet Neue Produktionsanlage in Monthey. Available online: <https://www.presseportal.ch/de/pm/100007946/100490695> (accessed on 17 February 2021).
41. Monthey, A. Huntsman Fabriquera Gratuitement du Gel Désinfectant. Available online: <https://www.24heures.ch/val-de-aoste/val-de-aoste-riviera-chablais/monthey-huntsman-fabriquera-gratuitement-gel-desinfectant/story/15153613> (accessed on 17 February 2021).

42. Production in Historic Plaster Factory—Optimized with Siemens Hardware. Plant Report. ZKB Cement Lime/Gypsum. Available online: https://www.zkg.de/en/artikel/zkg_Production_in_historic_plaster_factory_optimized_with_Siemens_hardware_2813657.html (accessed on 7 April 2021).
43. Historisches Lexikon der Schweiz (2009) Giovanola. Available online: <https://hls-dhs-dss.ch/de/articles/025118/2009-08-06/> (accessed on 17 February 2021).
44. Swissinfo. Tamoil Refinery to Stop Work in Switzerland. Available online: <https://www.swissinfo.ch/eng/crude-closure-tamoil-refinery-to-stop-work-in-switzerland/41214558> (accessed on 17 February 2021).
45. Office Cantonal de Statistique et de Péréquation du Canton du Valais. Le Valais en Chiffre 2020. 2021. Available online: <https://www.vs.ch/documents/189618/1547712/Le+Valais+en+chiffres+2020.pdf/fdb30581-ef21-ba4e-da5f-3dcc98f1b8b6?t=1613029115888?t=1617173189874> (accessed on 31 March 2021).
46. PwCs International Tax Comparisons. Get an Overview of the Tax Landscape in Switzerland and across the World with PwC. Available online: <https://www.pwc.ch/en/publications/2019/PwCs-international-tax-comparison-EN-web.pdf> (accessed on 17 February 2021).
47. Kaufmann, B. Söldnerwesen: Ludwig von Roll—Ein Solothurner Adliger im Kampf Gegen Napoleon. *Solothurner Zeitung*, 14 November 2017. Available online: <https://www.solothurnerzeitung.ch/solothurn/kanton-solothurn/ludwig-von-roll-ein-solothurner-adliger-im-kampf-gegen-napoleon-ld.1464823> (accessed on 31 March 2021).
48. A Blog to Watch. A Brief History of ETA: The Swiss Watch Movement Maker. Available online: <https://www.ablogtowatch.com/a-brief-history-of-eta/> (accessed on 17 February 2021).
49. Portrait Wyon AG. Maximum Energy and Minimum Size. Available online: <https://www.european-business.com/portraits/wyon-ag/maximum-energy-and-minimum-size> (accessed on 7 April 2021).
50. Romer, P. New goods, old theory, and the welfare costs of trade restrictions. *J. Dev. Econ.* **1994**, *43*, 5–38. [CrossRef]
51. Jacobs, J. *The Economy of Cities*; Vintage: New York, NY, USA, 2016.
52. Schluep, I.; Aerni, P. *When Corporatism Leads to Corporate Governance Failure: The Case of the Swiss Watch Industry*; Banson: Cambridge, UK, 2016.
53. Walser, R. Ein Lebenslanger Fitnesskurs. *Avenir Suisse Blog*. 2015. Available online: <https://www.avenir-suisse.ch/starker-franken-ein-lebenslanger-fitnesskurs/> (accessed on 21 February 2021).
54. Luginbühl, M. US Biotech Gigant Investiert 1 Milliarde Franken in der Schweiz. *Switzerland Global Enterprise*. Available online: <https://www.s-ge.com/de/article/aktuell/us-biotech-gigant-investiert-1-mrd-franken-der-schweiz> (accessed on 7 April 2021).
55. BAK Economics. *Die Bedeutung von Pharmaunternehmen für die Regionale Wirtschaft am Beispiel von Biogen*; BAK Basel: Basel, Switzerland, 2017. Available online: <https://www.bak-economics.com/berichte-studien/news/news/die-bedeutung-von-pharmaunternehmen-fuer-die-regionale-wirtschaft-am-beispiel-von-biogen> (accessed on 21 February 2021).
56. Lavoyer, S. Viele Neugründungen, aber keine Angesiedelten Top-Startups: Ist Solothurn zu wenig Unternehmerisch? *Solothurner Zeitung*. 2021. Available online: <https://www.solothurnerzeitung.ch/solothurn/kanton-solothurn/wirtschaft-viele-neugruendungen-aber-keine-angesiedelten-top-startups-ist-solothurn-zu-wenig-unternehmerisch-ld.2104590?reduced=true> (accessed on 21 February 2021).
57. Herkunft der Studierenden an Schweizer Hochschulen. Available online: <https://www.bfs.admin.ch/bfs/de/home/statistiken/kataloge-datenbanken/publikationen.assetdetail.348845.html> (accessed on 7 April 2021).
58. Francioli, R. Why Switzerland's Dual Track Education System is Unique. *Swissinfo*, 27 January 2020. Available online: <https://www.swissinfo.ch/eng/school-and-work/why-switzerland-s-dual-track-education-system-is-unique/45512392> (accessed on 7 April 2021).
59. CH Staatssekretariat für Bildung, Forschung und Innovation. Berufsbildung in der Schweiz: Fakten und Zahlen 2020. 2021. Available online: <https://www.sbfi.admin.ch/sbfi/de/home/dienstleistungen/publikationen/publikationsdatenbank/berufsbildung-in-der-schweiz.html> (accessed on 31 March 2021).
60. Forum for Democratic Initiatives. *Diaspora as a Driving Force for Development in Kosovo*. Swiss Agency for Development and Cooperation (SDC), 2009. Available online: https://www.eda.admin.ch/dam/deza/en/documents/laender/resource-183043_EN.pdf (accessed on 7 April 2021).
61. Hunt, J. What would Kosovo do without the Diaspora. *Swissinfo*, 2019. Available online: <https://www.swissinfo.ch/eng/going-home-what-would-kosovo-do-without-the-diaspora-/45206342> (accessed on 7 April 2021).
62. Williams, N.; Krasniqi, B.A. Coming out of conflict: How migrant entrepreneurs utilise human and social capital. *J. Int. Entrep.* **2018**, *16*, 301–323. [CrossRef]
63. Glaeser, E. *Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier*; Penguin Press: New York, NY, USA, 2011.
64. Balland, P.A.; Boschma, R.; Crespo, J.; Rigby, D.L. Smart specialization policy in the European Union: Relatedness, knowledge complexity and regional diversification. *Reg. Stud.* **2019**, *53*, 1252–1268. [CrossRef]
65. Muñoz, P.; Kimmitt, J. Rural entrepreneurship in place: An integrated framework. *Entrep. Reg. Dev.* **2019**, *31*, 842–873. [CrossRef]
66. Van Meeteren, M.; Poorthuis, A. Christaller and “big data”: Recalibrating central place theory via the geoweb. *Urban Geogr.* **2018**, *39*, 122–148. [CrossRef]
67. Mulligan, G.F.; Partridge, M.D.; Carruthers, J.I. Central place theory and its reemergence in regional science. *Ann. Reg. Sci.* **2012**, *48*, 405–431. [CrossRef]

68. Van Dam, A.; Frenken, K. Variety, complexity and economic development. *Res. Policy* **2020**, 103949. [\[CrossRef\]](#)
69. Glückler, J. How controversial innovation succeeds in the periphery? A network perspective of BASF Argentina. *J. Econ. Geogr.* **2014**, *14*, 903–927. [\[CrossRef\]](#)
70. Auerswald, P. Enabling entrepreneurial ecosystems. In *The Oxford Handbook of Local Competitiveness*; Audretsch, D., Link, A., Walshok, M., Eds.; Oxford University Press: Oxford, UK, 2015.
71. Meijers, E.; van der Wouw, D. Struggles and strategies of rural regions in the age of the ‘urban triumph’. *J. Rural Stud.* **2019**, *66*, 21–29. [\[CrossRef\]](#)
72. Johansson, M.; Nilsson, P.; Westlund, H. Migration and Ageing in Expanding and Shrinking European Regions. In *Modelling Aging and Migration Effects on Spatial Labor Markets*; Springer: Cham, Switzerland, 2018; pp. 107–131.
73. Jacobs, J. *Cities and the Wealth of Nations*; Vintage: New York, NY, USA, 1985.
74. Allianz, S.E. EU Rural-Urban Income Divide. 2019. Available online: https://www.allianz.com/en/press/news/studies/190812_Allianz-Research-EU-rural-urban-income-divide.html (accessed on 7 April 2021).
75. Hassink, R.; Gong, H. New economic geography. In *The Wiley Blackwell Encyclopedia of Urban and Regional Studies*; John Wiley & Sons: Hoboken, NJ, USA, 2019; pp. 1–6.
76. Ehrlich, M.V.; Overman, H.G. Place-based policies and spatial disparities across European cities. *J. Econ. Perspect.* **2020**, *34*, 128–149. [\[CrossRef\]](#)
77. McAfee, A. *More from Less: The Surprising Story of How We Learned to Prosper Using Fewer Resources—and What Happens Next*; Scribner: New York, NY, USA, 2019.
78. Mayer, H.; Habersetzer, A.; Meili, R. Rural–urban linkages and sustainable regional development: The role of entrepreneurs in linking peripheries and centers. *Sustainability* **2016**, *8*, 745. [\[CrossRef\]](#)
79. Chirico, F.; Sirmon, D.G.; Sciascia, S.; Mazzola, P. Resource orchestration in family firms: Investigating how entrepreneurial orientation, generational involvement, and participative strategy affect performance. *Strateg. Entrep. J.* **2011**, *5*, 307–326. [\[CrossRef\]](#)
80. Coase, R.H. The nature of the firm. In *The Nature of the Firm. Origins 1991, Evolution, and Development*; Oxford University Press: New York, NY, USA; Oxford, UK, 1937; Volume 18, p. 33.
81. Massaro, M.; Moro, A.; Aschauer, E.; Fink, M. Trust, control and knowledge transfer in small business networks. *Rev. Manag. Sci.* **2019**, *13*, 267–301. [\[CrossRef\]](#)
82. Maciel, A.F.; Fischer, E. Collaborative market driving: How peer firms can develop markets through collective action. *J. Mark.* **2020**, *84*, 41–59. [\[CrossRef\]](#)
83. Fukuyama, F. *Trust: Human Nature and the Reconstitution of Social Order*; Simon and Schuster: New York, NY, USA, 1996.
84. Claridge, T. Functions of social capital—bonding, bridging, linking. *Soc. Cap. Res.* **2018**, *20*, 1–7.
85. McCormick, K.; Anderberg, S.; Coenen, L.; Neij, L. Advancing sustainable urban transformation. *J. Clean. Prod.* **2013**, *50*, 1–11. [\[CrossRef\]](#)
86. Griskevicius, V.; Tybur, J.M.; Van den Bergh, B. Going green to be seen: Status reputation, and conspicuous conservation. *J. Personal. Soc. Psychol.* **2010**, *98*, 392. [\[CrossRef\]](#)
87. Gregson, N.; Crang, M.; Botticello, J.; Calestani, M.; Krzywoszynska, A. Doing the ‘dirty work’ of the green economy: Resource recovery and migrant labour in the EU. *Eur. Urban Reg. Stud.* **2016**, *23*, 541–555. [\[CrossRef\]](#)
88. Brenner, N.; Marcuse, P.; Mayer, M. (Eds.) *Cities for People, Not for Profit: Critical Urban Theory and the Right to the City*; Routledge: London, UK, 2012.
89. Naam, R. *The Infinite Resource: The Power of Ideas on a Finite Planet*; UPNE: Lebanon, NH, USA, 2013.
90. Aerni, P. *Business as Part of the Solution: SDG 8 Challenges Textbook Views on Sustainable Development*; MPDI Book Series on Transitioning toward Sustainability; 2021. Available online: <https://www.mdpi.com/books/pdfview/edition/1227> (accessed on 7 April 2021).
91. Hartmann, D.; Guevara, M.R.; Jara-Figueroa, C.; Aristarán, M.; Hidalgo, C.A. Linking economic complexity, institutions, and income inequality. *World Dev.* **2017**, *93*, 75–93. [\[CrossRef\]](#)